

Notice of Allowability

Application No.

10/807,398

Examiner

Robert R. Koehler

Applicant(s)

NISHIMURA ET AL.

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Preliminary Amendment filed on March 24, 2004.
2. ☒ The allowed claim(s) is/are 1-28.
3. ☒ The drawings filed on 24 March 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 06282004
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Robert R. Koehler

**ROBERT R. KOEHLER
PRIMARY EXAMINER**

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DETAILED ACTION

Allowable Subject Matter

Claims 1 to 28 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art search has not produced any references which teach, suggest, or disclose an aluminum alloy brazing sheet having the required structure comprising an aluminum alloy core material containing a magnesium content and at least one Al-Si-base cladding layer adjacent to the core material which must contain magnesium wherein the aluminum alloy brazing sheet must be manufactured in the form of a hollow structure. Also, the prior art does not teach, suggest, or disclose applicants' claimed method of brazing aluminum or aluminum alloy materials using a brazing sheet comprising an aluminum or aluminum alloy core which is clad with a filler alloy layer on at least one side of the core and containing magnesium at least in a layer constituting the brazing sheet other than the filler alloy layer wherein the brazing sheet is manufactured in the form of a hollow structure and the brazing operation is carried out by brazing on the inside of the formed hollow structure without applying flux in an inert gas atmosphere. Also, the prior art does not teach, suggest, or disclose applicants' claimed aluminum alloy brazing sheet having a structure of at least four layers positioned in the sequence of filler alloy, diffusion prevention layer, core material, and filler alloy wherein the core material must contain 0.2 to 1.5 weight percent magnesium. The Examiner cites U.S. Patent No. 5,069,980 (Namba, et al.) as relevant prior art. Namba, et al. teaches a vacuum-brazing aluminum cladding material consisting of a core member and a first and a second cladding which cover at least one surface of the core member. Namba, et al. does not teach or reasonably suggest an aluminum alloy brazing sheet having an aluminum alloy core material that must contain magnesium as claimed by the applicants. The Examiner believes that Namba, et al. teaches aluminum alloy brazing sheet structures having only prescribed amounts of magnesium in the first and second cladding layers,

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and the absence of any teaching or suggestion that would require magnesium in the core material causes the patent to be focused on obtaining improved brazing performance by using two magnesium-containing cladding layers.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Robert Koehler whose telephone number is **(571) 272-1536**. The Examiner can normally be reached on Tuesday to Friday from 9:30 AM to 7:00 PM. The Examiner can also be reached on alternate Mondays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Deborah Jones, can be reached on **(571) 272-1535**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

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Robert R. Koehler

ROBERT R. KOEHLER
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November 19, 2004